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AUTHOR	Moline, Arlett E.; Hendel, Darwin D.
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ABSTRACT

A study was done of ways to use data from the Cooperative Institutional Research Programs (CIRP) to provide information on policy questions related to international education. The CIRP survey is an annual project that provides participating institutions with the opportunity to use the database to explore questions concerning an institution's international activities. The study population included 1,403 entering freshmen at the Twin Cities campus of the University of Minnesota in the fall of 1991. The analysis focused on responses to three particular survey questions on international issues. Analysis of the student responses found that students for whom English was not their native language were frequently older and Asian-American. Students who spoke a language other than English at home were more likely to be female and Asian-American. Both students who were non-native English speakers and students who spoke a language other than English at home reported a lower parental income and had parents with lower levels of formal education. Students who placed personal importance on helping to promote racial understanding were more likely to be female, to speak a language other than English at home, and to be Asian-American. These students reported more hours during a typical week in high school were spent studying, volunteering, and participating in student clubs. They expected to take an active part in their college experience. The study concluded that institutions should consider ways in which they can do further analysis of the CIRP data. Included are a copy of the CIRP survey form and nine references. (JB)

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EXPLORING INTERNATIONAL ISSUES THROUGH THE USE OF CIRP DATA

Arlett E. Moline

and

Darwin D. Hendel

University of Minnesota

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This paper was presented at the Thirty-Second Annual Forum of the Association for Institutional Research held at the Atlanta Hilton & Towers, Atlanta, Georgia, May 10-13, 1992. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

Jean Endo
Chair and Editor
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Exploring International Issues Through the Use of CIRP Data

Abstract

A new direction in American higher education is the increased emphasis on multiculturalism and global perspectives. In keeping with this new direction is the importance of using existing databases to provide information to educational institutions about specific questions related to diversity and to international and global issues. This paper presents a way to use data from the Cooperative Institutional Research Program (CIRP) to provide information on policy questions related to international education. Three survey questions were used to examine international issues. Results indicate that both students who were non-native English speakers and students who spoke a language other than English at home, were likely to be Asian-American, report a lower parental income, and have parents with lower levels of formal education. Students who placed importance on promoting racial understanding were very active in high school (often in leadership roles) and expected to take an active part in their college experience by using student services, and also by doing volunteer and paid work, and by participating in clubs, student protests, and demonstrations. This paper will discuss the results in terms of both substantive content and methodology. It will also discuss a way in which other researchers can use CIRP data to provide answers to policy questions at their own institution.

Exploring International Issues Through the Use of CIRP Data

One of the new directions in American higher education is the increased emphasis on international education. Increasingly, institutional mission statements are reflecting international dimensions and a global perspective. Increasing numbers of international students are attending our colleges and universities (Wilson, 1990, November 28). Educational institutions are restructuring requirements to ensure that graduates are prepared to function effectively in a global environment, and increasing numbers of students are participating in study abroad programs at some point during their college years.

One of the problems inherent in any new direction in higher education is that the information base to support and direct institutional planning efforts often lags behind the initiatives. Few institutions have developed systematic procedures that provide information to help institutions plan educational experiences for students that are consistent with the increased emphasis on international education. Most student record systems provide little information that allows institutions to look at issues related to global education. Some systems are able to report participation rates, but they are often unable to relate student characteristics to relevant international questions.

The annual study of the Cooperative Institutional Research Program (CIRP), conducted jointly by the American Council on Education and the University of California, Los Angeles, provides participating institutions with the opportunity to use that database to explore questions concerning an institution's international activities. These data provide a rich resource of information for institutional researchers.

For 26 years CIRP has conducted an annual survey which provides data on the characteristics of first-time, full-time freshmen. The CIRP data consists of the responses to questions which provide a profile of the characteristics of new students. In 1991, the responses of over 210,000 students at 431 institutions across the country were included in the 1991 CIRP Freshman norms (Astin et al., 1991). The CIRP data consist of the responses to questions which provide a profile of new students, and through subsequent administrations can help to get a better understanding of how students are affected by their college experiences (Astin et al., 1989).

The most frequent use of the CIRP data consists of a descriptive analysis and a comparison of students at one college with students at similar institutions. These analyses have been useful; however, there are other types of potential analyses that are often overlooked. Although there are a few examples in the literature of studies using CIRP data (Astin, 1982; Dey, 1990; Dey & Astin, 1989; Smart & Pascarella, 1986), we believe that many institutions do not make full use of their data. Particularly in these times of economic shortage, institutions interested in international issues can use the CIRP data they

have already collected as a low-cost way of obtaining information about specific international questions.

One of the problems with the CIRP survey is that although it provides a great deal of informative and interesting data, it is sometimes perceived to be a heterogeneous set of loosely associated items. In addition, it is not always easy to relate those data to planning issues. We sought to overcome that weakness by categorizing the information provided by the CIRP data to address questions relevant to emerging policy considerations in the area of international education. This study will suggest a method by which the CIRP data can be used to provide answers to specific questions that are of interest to individual institutions.

In keeping with these ideas we selected three questions which may be relevant to understanding our increasingly diverse and international undergraduate student population. Each of the three questions corresponds to a specific CIRP item about diversity, and may contribute to more effective planning and policy decisions that relate to international populations. Each question serves as the basis of one of the three data analyses.

The following three policy-related questions were used in a series of additional analyses of the CIRP data:

> Question 1: Are new freshmen students for whom English is not their native language different from those for whom English is their native language?
>
> Question 2: Are new freshmen students who say that during the past year they spoke a language other than English at home different from those who say they spoke only English at home?
>
> Question 3: Are new freshmen students who place personal importance on helping to promote racial understanding different from those who say it is not important?

This paper has two purposes: first, to address the methodological issues of the CIRP procedure in addressing questions of the international experience of undergraduates, and second, to determine whether the responses of students to three policy-related questions concerning international education differentiate between the student groups.

Data Sources

The study population consists of new freshmen students who entered the Twin Cities campus of the University of Minnesota in the fall of 1991. During the fall student orientation, 1403 students participated in the annual study of the Cooperative Institutional Research Program (CIRP) and completed the CIRP Student Information Form (see Appendix). The study population included 1,307 full-time students, 6 part-time students, and 90 students

entering with fewer than 39 credits. This group represents 43% of the entering freshman class on the Twin Cities campus for fall quarter 1991. When the CIRP population is compared to the total population of Twin Cities campus new entering students for fall 1991 (N = 3262), it becomes apparent that there are some differences in the distribution of students across the six freshman admitting colleges. The CIRP population contains a higher proportion of College of Liberal Arts students than the total new student population (60.5% versus 52.4%), and a lower proportion of General College (19.5% versus 25.1%) and Institute of Technology Students (15.0% versus 17.4%).

Design and Methodology

Each of the three international issue questions provides a division of the CIRP population into two groups of students (e.g., On Question 1, the two groups of students are those who are native English speakers and those who are not). Each analysis of the three questions consists of a comparison of two groups of students on all the other items on the CIRP survey. We looked at differences as a function of how students respond to the items. The reported results represent items for which there were differences between the two groups as reflected by statistically significant t-tests or chi-squares ($p<.05$).

We conducted the data analyses on 240 items from the 1991 Student Information Form. When CIRP provides the information to each institution on a data file diskette, each item is given a position number on the data file. In this paper, each of those position numbers will be considered to be an item. The actual Student Information Form is four pages long and lists only 39 questions (many items are included within a single question).

A review of the survey data reveals that the content is not presented in a highly organized way. This is often a problem for institutional researchers as they try to describe the diverse results. For discussion purposes in this paper, the 240 items in the CIRP data file were classified into one of nine issue-related categories. A complete list of the items that are included in each issue are presented in Table 1. We are not suggesting that this is the best way or the only way in which the content might be organized. Rather, it is an illustration of how the data may be grouped to make it more meaningful. The report summarizes the results of the comparison of the two groups of students for the following nine issue-related categories of items:

1. Demographic Characteristics of Students--26 items.
2. Characteristics of Parents--6 items.
3. Secondary School Experience--24 items.
4. College Finances--19 items.
5. Orientation Towards College--17 items.
6. Expectations of the College Experience--54 items.
7. Degree Goals and Career Plans--2 items.
8. Attitudes, Values, Aspirations, Life Goals--82 items.
9. Past Enrollment History--10 items.

Table 1
1991 CIRP Items Categorized by Issue

Issue 1. Demographic Characteristics of Students (N = 26)
Position numbers--6, 7, 8, 11, 39, 40, 62 thru 68, 69, 70, 71, 72, 85, 118 thru 125.

Issue 2. Characteristics of Parents (N = 6)
Position numbers--41, 115, 116, 117, 138, 139.

Issue 3. Secondary School Experience (N = 24)
Position numbers--9, 12, 42, 162 thru 170, 171 thru 179, 258, 259, 260.

Issue 4. College Finances (N = 19)
Position numbers--43 thru 61.

Issue 5. Orientation Towards College (N = 17)
Position numbers--13 thru 24, 34, 35, 36, 37, 38.

Issue 6. Expectations of the College Experience (N = 54)
Position numbers--126 thru 136, 181 thru 198, 218 thru 242.

Issue 7. Degree Goals and Career Plans (N = 2)
Position numbers--137, 199.

Issue 8. Attitudes, Values, Aspirations, Life Goals. (N = 82)
Position numbers--73 thru 97, 98 thru 114, 140 thru 161, 180, 200 thru 217.

Issue 9. Past Enrollment History (N = 10)
Position numbers--25, 26 thru 33, 243.

Note. The item/position number of each variable corresponds to the position of that variable on the 1991 Student Information data file diskette that was provided by CIRP. The position numbers are indicated for each question on the CIRP Student Information Form provided in the Appendix.

The information is presented in the form of a descriptive profile of one of the two groups of students for each question. The profiled group was chosen on the basis of its relevance to discussions of international issues; however, there is in addition, always a profile of the opposite group. The profiles were constructed using the information obtained from the CIRP items where statistically significant differences ($p<.05$) between the groups were found. The summary student profiles for each of the three questions are presented in a later section of this paper. This paper is focused on the methodology and on the findings as they relate to the results of this method rather than focusing totally on the substance of the content itself.

Results and Implications for Institutional Researchers

The results will be presented in terms of both the methodological and content questions that were identified in the introduction.

Table 2 contains an overall summary of the results of the statistically significant items on each of the three policy-related questions for each of the nine issues covered by the 240 CIRP items. The table reports the total number of items included in each of the nine issues. For each issue category on each question; the table also reports the number of items which were statistically significant ($p<.05$), the percentage of the total items in that issue which were statistically significant, and the rank of the percentage. For example (see Table 2, Question 1, "Are new freshmen students for whom English is not their native language different from those for whom English is their native language?"), for "Issue 2. Characteristics of Parents", 3 of the 6 possible items/comparisons were statistically significant. The three items represent 50.0% of the total number of items that were categorized as Issue 2. That 50.0% obtained a rank of 1 when the percentage of significant items was considered across the nine issues on that policy question. Over all of the 239 items for which significance tests were conducted on that question (one item was removed from the analysis because it was the basis of the question), there were 91 statistically significant differences obtained (38.1%). Table 2 also provides the overall rank of each of the nine issues across the three questions.

An analysis of the results indicated that the greatest number of differences between groups occurred for Question 3 concerning the promotion of racial understanding (43.9%). Second, was Question 1 concerning non-native English speaking students (38.1%). Third was Question 2 concerning students who spoke another language at home (29.7%). This suggests that there are fewer differences between the students who spoke a language other than English at home and those who spoke only English (as on Question 2) than between the two groups on either Question 1 or Question 3.

Differences between groups were most likely to be found in Issue 6, Expectations of the College Experience (e.g., reasons for choosing the

Table 2
Summary of Statistically Significant Differences Between Student Groups, by Question and Issue

Issue	Number of tests	Q1. Non-native English speakers			Q2. Spoke another language at home			Q3. Promote racial understanding			Overall Rank of Issue
		Signif Tests [a]	% Signif [b]	Rank [c]	Signif Tests [a]	% Signif [b]	Rank [c]	Signif Tests [a]	% Signif [b]	Rank [c]	
1. Demographics	26	6	24.0%[d]	6	6	24.0%[d]	6	6	23.1%	4	5.3
2. Characteristics of Parents	6	3	50.0%	1	3	50.0%	1	1	16.7%	5	2.3
3. Secondary School Experience	24	8	33.3%	5	6	25.0%	5	9	37.5%	3	4.3
4. College Finances	19	9	47.4%	2	1	5.3%	8	2	10.5%	6	5.3
5. Orientation Towards College	17	4	23.5%	7	5	29.4%	4	1	5.9%	7	6.0
6. Expectations of the College Experience	54	25	46.3%	3	21	38.9%	2	35	64.8%	1	2.0
7. Degree Goals and Career Plans	2	0	00.0%	9	0	00.0%	9	0	00.0%	8.5	8.8
8. Attitudes, Values, Aspirations, Life Goals	82	35	42.7%	4	28	34.1%	3	51	63.0%[e]	2	3.0
9. Past Enrollment History	10	1	10.0%	8	1	10.0%	7	0	0.0%	8.5	7.8
Total	240	91	38.1%[f]		71	29.7%[f]		105	43.9%[f]		

[a] This column indicates the number of items (t-tests and chi-squares) that were statistically significant ($p<.05$).
[b] This column indicates the percentage of the total number of items for that issue that were statistically significant ($p<.05$).
[c] This column indicates the ranking of the percentage of statistically significant items for that issue within that question.
[d] % based on 25 items--one item was removed from the analysis because it was the basis for the question.
[e] % based on 81 items--one item was removed from the analysis because it was the basis for the question.
[f] % based on 239 items--one item was removed from each analysis because it was the basis for the question.

University, expectation of events or actions while in college) and least likely to be found in Issue 7, Degree Goals, and Career Plans, (e.g., major and probable career occupation).

The substantive results of the study will be presented in the form of a descriptive profile of one of the two groups of students for each question. The profiled group was chosen on the basis of its relevance to policy or planning discussions. The profiles were constructed using the information obtained from the CIRP items where statistically significant differences between the groups were found.

The results suggest that:

(1) Students for whom English was not their native language were frequently older, and Asian-American. They had lower parental income and both parents had lower levels of formal education. These students reported that in their last year of high school they spent more time studying and on homework and less time socializing or working for pay. They seemed to lack self-confidence in a number of areas, and didn't express a great deal of optimism about their future career and satisfaction, yet they indicated that it was important to them personally that they be very well off financially. Their parents wanted them to go to college.

(2) Students who say that during the past year they spoke a language other than English at home were more likely to be female and to be Asian-American. They had lower parental income and both parents had lower levels of formal education. They spent more time on homework and studying and less time on socializing or working for pay. They reported that they decided to go to college because they wanted to gain a general education and appreciation of ideas and wanted to be more cultured people. They were less likely to say they were attracted to this particular college because it has a good academic reputation. They indicated that it was important to them personally that they influence the political structure and social values.

(3) Students who placed personal importance on helping to promote racial understanding were more likely to be female, to speak a language other than English at home, to be non-native English speakers, and to be Asian-American. They reported more hours during a typical week in high school were spent on both studying and homework, but also on volunteer work and student clubs. These students were active in high school; they provided leadership in various student groups. They expected to take an active part in their college experience by using services such as counseling and tutoring, but also by participating in student protests or demonstrations, by working at an outside job while attending college, and by participation in volunteer or community service work. They rated themselves as less competitive and more cooperative than the average person their age. They were willing to have the Federal government play a strong role in regulating

and prescribing behavior, and characterized themselves as toward the left or liberal.

Although the results are presented in terms of the three student profiles, the groups should not be considered to be totally independent of each other; the groups do overlap. For example, some non-native English speaking students were also in the group that thought it was important to promote racial understanding. Therefore, the three sets of results are not independent of each other.

There were numerous items for which there were statistically significant differences in response to the CIRP survey; however, it should be noted that many of the differences were quite small. Some items, therefore, may not differentiate between groups in ways that are practically or educationally meaningful (e.g., a difference in age of 18.6 and 18.9 may be statistically significant but may have limited implications for education).

Results--Summary Student Profiles

What follows, are summary student profiles for each of the three questions, that concern student characteristics useful in thinking about international and multicultural issues on campus.

Question 1 - Summary Profile of Students for Whom English Is Not Their Native Language

Overall, across the 239 comparisons for this question, there were 91 (38.1%) statistically significant differences between students for whom English was not their native language (N = 124) and those for whom it was (N = 1272). This question had the second highest percentage of statistically significant differences of the three questions. The large number of differences suggests that students for whom English is a second language are likely to differ from students who are native English-speakers.

Non-native English speaking students were more likely to be older, to be Asian American, and to report that they live closer to the University. Their family had a lower parental income, and both their father and their mother had lower levels of formal education (usually some high school or less).

Non-native English speaking students indicated that during a typical week during their last year in high school, they spent more time on studying or homework and less time on socializing with friends, exercising or sports, partying, or working for pay. They reported they had lower SAT Verbal and SAT Math scores. Not surprisingly, non-native English speaking students feel they will need special tutoring or remedial work in English, Math and Science, and they were less likely to have had remedial work in English.

Financially, these students expected to have less of their first year's educational expenses (room, board, tuition, fees) covered by their parents, other relatives or friends, by their spouse, by savings from summer work or other savings, by Stafford/Guaranteed Student Loans, or other private grants. They expected more of their expenses to be covered by Pell grants, Supplemental Educational Opportunity Grants, and Perkins loans.

Non-native English speaking students indicated that important reasons in deciding to go to college were that their parents wanted them to go, there was nothing better to do, and they couldn't find a job. However, they also said they wanted to gain a general education and appreciation of ideas, to improve their reading and study skills, and to prepare for grad school. It was not important to them that they get away from home.

They were more likely to say that some reasons that influenced their decision to attend this particular college were that their relatives wanted them to come here, or they were advised and encourage by a teacher, counselor or recruiter to come here. Other important reasons were that they were offered financial assistance, that this college offers special educational programs,

and that this college's graduates gain admission to top graduate/professional schools and get good jobs. They were also attracted by the racial/ethnic make up of the student body at this college.

Non-native English speaking students were less likely to believe they would get a job to help pay for college expenses, find a job after college in the field for which they were trained, be satisfied with their college, or get married while in college. They were more likely to believe they would get tutoring help in specific courses, would fail one or more courses, and would seek vocational counseling.

When asked to rate themselves on a list of traits as compared with the average person their age, the non-native English speaking students rated themselves lower on academic ability, intellectual self-confidence, writing ability, and reading speed/comprehension. They also rated themselves lower on popularity, public speaking, and leadership ability. They were more likely to say that during the past year they had felt depressed.

On the opinion items, non-native English speaking students seemed to approve of strong involvement of the Federal government in the lives of individuals. They were more likely to agree that there is too much concern in the courts for the rights of criminals, that busing is O.K. if it helps to achieve racial balance in the schools, that employers should be allowed to require drug testing of employees or job applicants, that the best way to control AIDS is through widespread, mandatory testing, that the Federal government should do more to control the sale of handguns, and that a national health care plan is needed to cover everybody's medical costs. They believe that the chief benefit of a college education is that it increases one's earning power, and that the activities of married women are best confined to home and family.

These students are more likely to say that it is important to them personally that they have administrative responsibility for the work of others, that they become successful in a business of their own, that they be very well off financially. However, they also want to help others who are in difficulty, participate in a community action program and help to promote racial understanding.

Question 2 - Summary Profile for Students Who Say That During the Past Year They Spoke a Language Other Than English At Home.

This analysis compares two groups of students: 458 who spoke a language other than English at home during the past year, and 915 who spoke only English. Significance tests were performed to compare the responses of the two groups on 239 items. Statistically significant differences ($p<.05$) were found on 71 of the 239 items (29.71%). This question had the lowest percentage of statistically significant differences of the three questions. The results are presented in the form of a profile of students who say they spoke a language other than English at home during the past year.

Students who spoke a language other than English at home were more likely to be female and to be Asian-American. The education level of both their father and mother were likely to be some high school or less. They estimated that their parents had a lower income, and that they were likely to have less of their first year's educational expenses (room, board, tuition, fees) covered by their parents, other relatives or friends. They were more likely to say they planned to live with parents or relatives during fall term.

These students reported that during a typical week in their last year in high school they spent more time on studying or homework, talking with teachers, and in student clubs or groups than students who spoke only English at home. They were more likely to feel they would need special tutoring or remedial work in English, reading, social studies, and science, and they reported lower ACT composite scores. They also spent less time socializing with friends or working for pay.

Students who spoke a language other than English at home were more likely to say that the reasons they decided to go to college were that they wanted to gain a general education and appreciation of ideas, to improve their reading and study skills, to prepare themselves for graduate or professional school, and to make them more cultured people. However, they were also more likely to say they decided to go to college because they couldn't find a job, or there was nothing better to do.

This group of students was more likely to say that the reasons that influenced their decision to attend this particular college were that their relatives wanted them to come here, they wanted to live near home, and a college representative recruited them. Other reasons were that this college offers special educational programs, this college's graduates get good jobs, or they were attracted by the racial/ethnic make up of the student body at this college. They also were more likely to say that reasons that influenced their decision were that they were offered financial assistance and they were not accepted anywhere else. Students who spoke a language other than English at home were less likely to say that a reason to attend this particular college was that this college has a very good academic reputation. These students were also more likely to say that prior to this term they had taken courses for credit at this institution.

Students who spoke a language other than English at home were more likely to believe that they would be elected to a student office, participate in volunteer or community service work, that they would get tutoring help in specific courses, and they would fail one or more courses. They were less likely to believe that they would find a job after college in the field for which they were trained.

When asked what activities they had engaged in during the past year, students who spoke a language other than English at home were more likely to say that during the past year they had studied with other students, tutored another student, did extra (unassigned) work/reading for a class, asked a teacher for advice after class, were a guest in a teacher's home, and performed volunteer work. They also indicated they were more likely to have come late to class, felt overwhelmed by all they had to do, and felt depressed. They were less likely to say that during the past year they had attended a religious service.

When asked to rate themselves on a list of traits as compared with the average person their age, the students who spoke a language other than English at home rated themselves higher on cooperativeness and lower on academic ability, reading speed/comprehension, and mechanical ability.

On the opinion items, these students were more likely to strongly agree that the Federal government should do more to control the sale of handguns and to discourage energy consumption. They were of the opinion that nuclear disarmament is attainable, and that a national health care plan is needed to cover everybody's medical costs.

Students who spoke a language other than English at home indicated they place higher personal importance on goals such as making a theoretical contribution to science, obtaining recognition from their colleagues for contributions to their special field, and influencing the political structure and social values. It was important to them personally to have administrative responsibility for the work of others and to be successful in a business of their own. They also placed importance on being involved in programs to clean up the environment, participating in a community action program, helping others who are in difficulty, and helping to promote racial understanding.

Question 3 - Summary Profile for Students Who Place Personal Importance on Helping to Promote Racial Understanding.

Overall, across the 239 comparisons for this question, there were 105 (43.9%) statistically significant differences between students who say they place personal importance on helping to promote racial understanding (N = 1046) and those who say it is not important (N = 202). This question had the highest percentage of statistically significant differences of the three questions. This larger number of differences suggests that students who place importance on promoting racial understanding differ from students who do not on a wide range of questions.

Students who indicate that they place personal importance on helping to promote racial understanding were more likely to be students for whom English was not their native language, to have spoken a language other than English at home during the past year, and to be permanent residents (green card). They were more likely to be female, and to be Asian-American. They were also more likely to report a lower parental income and expected to have more of their first year's educational expenses (room, board, tuition, and fees) covered by a part-time on campus job or by some type of college loan.

These students also reported that during a typical week in their last year in high school that they spent more time on studying or homework, talking with teachers, on student clubs and groups, and on volunteer work than students who did not place importance on promoting racial understanding. They also reported that they had lower SAT Math scores and were more likely to feel they would need special tutoring or remedial work in math.

Students who believed it was important to help promote racial understanding were more actively engaged in school activities as leaders during the past year than those students who felt it was less important. They reported they were more likely to have been elected president of one or more student organizations, edited a school publication, had a major part in a play, and to have participated in course-related community service projects.

For this group of students, important reasons in deciding to go to college were to gain a general education and appreciation of ideas, to learn more about things that interest them, and to make them more cultured people. Other important reasons were to improve reading and study skills, to be able to make more money, and to prepare for graduate or professional school.

They were more likely to say that some reasons that influenced their decision to attend this particular college were that this college has a good academic and social reputation, this college offers special educational programs, and this college's graduates get good jobs and gain admission to top graduate/professional schools. They were also more likely to say this college has low tuition, they were offered financial assistance, and they wanted to go to a school about the size of this college. They also were more likely to say that they were advised by their teacher or guidance counselor to attend this

college, or were recruited by a college representative. They were attracted by the racial/ethnic makeup of the student body at this college. They also were more likely to say that they were influenced to attend this college because they were not accepted anywhere else.

Their best guess would be that they would be elected to an academic honor society and to a student office, join a social fraternity, sorority, or club, participate in volunteer or community service work and in student protests or demonstrations. They believe they would work at an outside job (possibly full-time) while attending college to help pay for college expenses. They would seek vocational counseling and individual counseling on personal problems, get tutoring help in specific courses, get a bachelor's degree (B.A., B.S., etc.), but drop out of college temporarily (excluding transferring), and need extra time to complete their degree requirements. They were also more likely to get married while in college.

Students who believed it was important to help promote racial understanding were more likely to say that during the past year they had studied with other students, did extra (unassigned) work/reading for a class, asked a teacher for advice after class, and were a guest in a teacher's home. They discussed politics and sex, voted in a student election, performed volunteer work, participated in organized demonstrations, and demonstrated for a change in some military policy. They were also more likely to have played a musical instrument, smoked cigarettes, felt overwhelmed by all they had to do, and felt depressed.

When asked to rate themselves on a list of traits as compared with the average person their age, they rated themselves lower on competitiveness, mathematical ability, and mechanical ability. They rated themselves higher on cooperativeness, public speaking ability, and understanding of others.

On the opinion items students who believed it was important to promote racial understanding were more likely to agree that the Federal government is not doing enough to protect the consumer from faulty goods and service or doing enough to control environmental pollution, that the Federal government should do more to discourage energy consumption, should raise taxes to reduce the deficit, and should do more to control the sale of handguns. They believe busing is O.K. if it helps to achieve racial balance in the schools, and a national health care plan is needed to cover everybody's medical costs. They also believe that nuclear disarmament is attainable, and that the death penalty should be abolished.

They are less likely to agree that there is too much concern in the courts for the rights of criminals and that Federal military spending should be increased. They would also not agree that it is important to have laws prohibiting homosexual relationships or that the activities of married women are best confined to home and family. These students would not agree that the chief benefit of a college education is that it increases one's earning power, that racial discrimination is no longer a major problem in

America, or that realistically, an individual can do little to bring about changes in our society. They would be more likely to characterize their political views as toward the left or liberal.

Students who believed it was important to help promote racial understanding were less likely to say it was important to them personally that they be very well off financially. They were more likely to say that it was important to become accomplished in one of the performing arts (acting, dancing, etc.), to write original works (poems, novels, short stories, etc.), create artistic work (painting, sculpture, decorating, etc.), and to obtain recognition from their colleagues for contributions to their special field. They wanted to influence social values, help others who are in difficulty, and raise a family. They also wanted to make a theoretical contribution to science, influence the political structure, keep up to date with political affairs, be involved in programs to clean up the environment, participate in a community action program, and develop a meaningful philosophy of life.

Conclusions and Recommendations

This paper is written for other institutional researchers who may have the CIRP data and may not have looked at it in ways other than the traditional descriptive analysis. We believed there was additional value in the data set and began considering methods of analysis that would be useful in addressing policy-related questions. In these days of limited budgets in higher education it seems to be especially important to make maximum use of each set of data that is collected.

1. Institutions should consider ways in which they can do further analysis of the CIRP data. To conduct some additional analysis of policy and planning related questions at your own institution, one could begin by consulting with administrators and identifying areas of emerging interest for which further information would be useful. Then examine each item in the CIRP survey to see whether it could potentially contribute information to that question. A different approach might be to first begin by looking at each item and trying to identify whether the item could provide useful information on a planning or policy issue. For each item ask the question "Could this item provide information relevant to a policy or planning question that is either emerging or already present at this institution?" We did it the latter way for this international study but in earlier papers on five policy issues (Moline & Hendel, 1991a, 1991b) we did it the former way, by identifying the question first. It may be done either way. Every item in the CIRP survey has the potential for further data analysis.

2. In our exploratory study we worked with all the CIRP items. If there are restraints on computer time, money, staff, etc., other institutions might consider working with a more limited number of items. To select a reduced set of items before embarking on an analysis, go through each question on the Student Information Form and consider whether it should be included in an analysis. Of each item ask the question, "If there were a significant difference on this item would there be a meaningful and/or useful interpretation?" For instance, for many institutions it would be difficult to interpret or use information from the question "Do you consider yourself a born-again Christian?"

The rankings of the issues across the three questions (see Table 2, Rank) may also be useful in deciding which items to include in a reduced analysis. In this study significant differences between groups were most likely to be found in the items in Issue 6, Expectations of the College Experience, and least likely to be found in the items in Issue 7, Degree Goals and Career Plans.

If you are trying to work with a reduced set of items, you may also want to look for items that might be considered for exclusion. For our research questions, the opinion items rarely resulted in significant differences between the groups, and when they did we still did not know how to interpret

them or what they meant. In addition, none of the questions relating to the students' major, career occupation, religious preference, or degree aspirations were significant on any of the three questions.

3. When looking at the analysis of the CIRP data it is important that the results are not "over-interpreted". Researchers never know what framework the students may be using as they answer each individual question. For example, on Question 2 in this study where students were asked if they spoke a language other than English at home during the past year, they may have not answered it in the framework of an international question, and instead thought of the few occasions when they were at home and had practiced some foreign language phrases for a class they were taking in school.

4. Within each institution, specific units (i.e., colleges, programs, and academic and student support units) might also consider downloading the data and analyzing it in ways that have particular importance for their unit (e.g., How do the experiences and expectations of students with disabilities differ from those of other students?).

5. Most of the studies that have been done using CIRP data have dealt with individual items. A different approach would be to develop some summary indices that would look at groups of items. Currently we are doing preliminary work in this area to see if any groups of items could constitute scales which might provide a useful way of looking at the data. Researchers at other institutions might also consider the development of summary indices that would allow comparisons of groups across different years of administration of the CIRP.

6. The CIRP Student Information Form contains ten blank items which an institution can use for including their own unique questions. We encourage institutions to take advantage of those blank items to develop their own questions relating to policy; this would be an ideal way to look at international issues. Several suggested questions might be "Do you expect to participate in formal study abroad?", or "Do you speak a language other than English?" The data for these questions will be collected and analyzed by CIRP at no additional cost. If there was inter-institutional collaboration on this type of effort, and several institutions collected the same additional questions, the result could be a valuable contribution to institutional research on international education. The ten questions need to be provided to each student on a separate sheet of paper which is passed out with the CIRP questionnaire. Researchers would need to find ways to impress upon the students the importance of completing the additional questions in order to get useful completion rates on these questions. Our experience in 1991 with using the additional items resulted in considerably lower response rates.

7. In conclusion, we found that the CIRP process provided a cost effective way for institutions to look at certain international issues. Though the CIRP Student Information Form contains many different variables often considered dependent, the survey had relatively few questions focused on international questions and concerns, thereby limiting the use of the CIRP data. We found in this study and in a previous study that policy makers and administrators responded favorably to the method we used to address policy questions in areas where information was needed.

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PLEASE PRINT (one letter or number per box)

NAME: FIRST | M I | LAST

ADDRESS:

CITY: STATE: ZIP: PHONE: — —

When were you born? Month (01–12) Day (01–31) Year

1991 STUDENT INFORMATION FORM

DIRECTIONS

Your responses will be read by an optical mark reader. Your careful observance of these few simple rules will be most appreciated.

- Use only black lead pencil (No. 2 is ideal).
- Make heavy black marks that fill the oval.
- Erase cleanly any answer you wish to change.
- Make no stray markings of any kind.

EXAMPLE:

Will marks made with ballpoint or felt-tip marker be properly read? Yes...○ No...●

FORM NO.: 556619

PLEASE PROVIDE YOUR SOCIAL SECURITY NO.

Mark here if directed: GRP CODE A | GRP CODE B

Dear Student:

The information in this form is being collected as part of a continuing study of higher education conducted jointly by the American Council on Education and the University of California at Los Angeles. Your voluntary participation in this research is being solicited in order to achieve a better understanding of how students are affected by their college experiences. Detailed information on the goals and design of this research program are furnished in research reports available from the Higher Education Research Institute at UCLA. Identifying information has been requested in order to make subsequent mail follow-up studies possible. Your response will be held in the strictest professional confidence.

PLEASE USE #2 PENCIL

Sincerely, Alexander W. Astin

Alexander W. Astin, Director
Higher Education Research Institute

P6 1. Your sex: Male...○ Female...○

P7 2. How old will you be on December 31 of this year? (Mark one)

16 or younger	○	21-24	○
17	○	25-29	○
18	○	30-39	○
19	○	40-54	○
20	○	55 or older	○

P8 3. Are you a twin? (Mark one)

No ...○ Yes, identical..○ Yes, fraternal..○

P9 4. In what year did you graduate from high school? (Mark one)

1991	○	Did not graduate but passed G.E.D. test	○
1990	○		
1989	○	Never completed high school	○
1988 or earlier	○		

P10 5. Are you enrolled (or enrolling) as a: (Mark one) Full-time student? ○ Part-time student? ○

P11 6. How many miles is this college from your permanent home? (Mark one)

5 or less ○	11-50 ○	101-500 ○
6-10 ○	51-100 ○	Over 500 ○

P12 7. What was your average grade in high school? (Mark one)

A or A+ ○	B ○	C ○
A- ○	B- ○	D ○
B+ ○	C- ○	

8. What were your scores on the SAT and/or ACT?

P25 SAT VERBAL.....

P26 SAT MATH.....

P27 ACT Composite .....

9. Have you had, or do you feel you will need, any special tutoring or remedial work in any of the following subjects? (Mark all that apply)

	Have Had	Will Need
English	P13 ○	P19 ○
Reading	P14 ○	P20 ○
Mathematics	P15 ○	P21 ○
Social studies	P16 ○	P22 ○
Science	P17 ○	P23 ○
Foreign language	P18 ○	P24 ○

P25 10. Prior to this term, have you ever taken courses for credit at this institution? ○Yes ○No

11. Since leaving high school, have you ever taken courses at any other institution? (Mark all that apply in each column)

	For Credit	Not for Credit
No	P26 ○	P30 ○
Yes, at a junior or comty. college	P27 ○	P31 ○
Yes, at a 4-yr. college or university	P28 ○	P32 ○
Yes, at some other postsecondary school (For example, technical, vocational, business)	P29 ○	P33 ○

P34 12. Where do you plan to live during the fall term? (Mark one)

With parents or relatives ○
Other private home, apartment or room ○
College dormitory ○
Fraternity or sorority house ○
Other campus student housing ○
Other ○

P35 13. Is this college your: (Mark one)

First choice? ○ Second choice? ○ Third choice? ○ Less than third choice? ○

P36 14. To how many colleges other than this one did you apply for admission this year?

No other	1 ○	3 ○	5 ○
○	2 ○	4 ○	6 or more ○

15. What is the highest academic degree that you intend to obtain? (Mark one in each column)

	Highest Planned P37	Highest Planned this college P38
None	○	○
Vocational certificate	○	○
Associate (A.A. or equivalent)	○	○
Bachelor's degree (B.A., B.S., etc.)	○	○
Master's degree (M.A., M.S., etc.)	○	○
Ph.D. or Ed.D.	○	○
M.D., D.O., D.D.S., or D.V.M.	○	○
LL.B., or J.D. (Law)	○	○
B.D. or M.DIV. (Divinity)	○	○
Other	○	○

P39 16. Is English your native language? ○Yes ○No

17. Are you a:

P40 ○ U.S. citizen
○ Permanent resident (green card)
○ Neither

P41 18. Are your parents: (Mark one)

Both alive and living with each other? ○
Both alive, divorced or separated? ○
One or both deceased? ○

P42 19. From what kind of secondary school did you graduate? (Mark one)

Public ○
Private (denominational) ○
Private (nondenominational) ○
Other ○

20. How much of your first year's educational expenses (room, board, tuition, and fees) do you expect to cover from each of the sources listed below? (Mark one answer for each possible source)

	None	$1-$499	$500-$999	$1,000-$1,499	$1,500-$1,999	$2,000-$3,000	Over $3,000
a. My Own or Family Resources							
P43 Parents, other relatives or friends	○	○	○	○	○	○	○
P44 Spouse	○	○	○	○	○	○	○
P45 Savings from summer work	○	○	○	○	○	○	○
P46 Other savings	○	○	○	○	○	○	○
P47 Part-time on campus job	○	○	○	○	○	○	○
P48 Part-time job off campus	○	○	○	○	○	○	○
P49 Full-time job while in college	○	○	○	○	○	○	○
b. Aid Which Need Not Be Repaid							
P50 Pell Grant	○	○	○	○	○		
P51 Supplemental Educational Opportunity Grant	○	○	○	○	○		
P52 State Scholarship or Grant	○	○	○	○	○		
P53 College Work-Study Grant	○	○	○	○	○		
P54 College Grant/Scholarship (other than above)	○	○	○	○	○	○	○
P55 Other private grant	○	○	○	○	○	○	○
P56 Other Government Aid (ROTC, BIA, GI/military benefits, etc.)	○	○	○	○	○	○	○
c. Aid Which Must Be Repaid							
P57 Stafford/Guaranteed Student Loan	○	○	○	○	○		
P58 Perkins Loan	○	○	○	○	○		
P59 Other College Loan	○	○	○	○	○	○	○
P60 Other Loan	○	○	○	○	○	○	○
P61 **d. Other Than Above**	○	○	○	○	○	○	○

21. Are you: (Mark all that apply)

- P62 ○ White/Caucasian
- P63 ○ African-American/Black
- P64 ○ American Indian
- P65 ○ Asian-American/Oriental
- P66 ○ Mexican-American/Chicano
- P67 ○ Puerto Rican-American
- P68 ○ Other

22. Current religious preference: (Mark one in each column)

	P69 Yourself	P70 Father	P71 Mother
Baptist	Ⓨ	Ⓕ	Ⓜ
Buddhist	Ⓨ	Ⓕ	Ⓜ
Eastern Orthodox	Ⓨ	Ⓕ	Ⓜ
Episcopal	Ⓨ	Ⓕ	Ⓜ
Islamic	Ⓨ	Ⓕ	Ⓜ
Jewish	Ⓨ	Ⓕ	Ⓜ
LDS (Mormon)	Ⓨ	Ⓕ	Ⓜ
Lutheran	Ⓨ	Ⓕ	Ⓜ
Methodist	Ⓨ	Ⓕ	Ⓜ
Presbyterian	Ⓨ	Ⓕ	Ⓜ
Quaker	Ⓨ	Ⓕ	Ⓜ
Roman Catholic	Ⓨ	Ⓕ	Ⓜ
Seventh Day Adventist	Ⓨ	Ⓕ	Ⓜ
United Church of Christ	Ⓨ	Ⓕ	Ⓜ
Other Protestant	Ⓨ	Ⓕ	Ⓜ
Other Religion	Ⓨ	Ⓕ	Ⓜ
None	Ⓨ	Ⓕ	Ⓜ

23. Do you consider yourself a born-again Christian? P72 ○ Yes ○ No

24. For the activities below, indicate which ones you did during the past year. If you engaged in an activity frequently, mark Ⓕ. If you engaged in an activity one or more times, but not frequently, mark Ⓞ (occasionally). Mark Ⓝ (Not at all) if you have not performed the activity during the past year.

(Mark one for each item)

	Frequently	Occasionally	Not at all
P73 Attended a religious service	Ⓕ	Ⓞ	Ⓝ
P74 Was bored in class	Ⓕ	Ⓞ	Ⓝ
P75 Participated in organized demonstrations	Ⓕ	Ⓞ	Ⓝ
P76 Failed to complete a homework assignment on time	Ⓕ	Ⓞ	Ⓝ
P77 Tutored another student	Ⓕ	Ⓞ	Ⓝ
P78 Did extra (unassigned) work/reading for a class	Ⓕ	Ⓞ	Ⓝ
P79 Studied with other students	Ⓕ	Ⓞ	Ⓝ
P80 Was a guest in a teacher's home	Ⓕ	Ⓞ	Ⓝ
P81 Smoked cigarettes	Ⓕ	Ⓞ	Ⓝ
P82 Drank beer	Ⓕ	Ⓞ	Ⓝ
P83 Drank wine or liquor	Ⓕ	Ⓞ	Ⓝ
P84 Stayed up all night	Ⓕ	Ⓞ	Ⓝ
P85 Spoke a language other than English at home	Ⓕ	Ⓞ	Ⓝ
P86 Felt overwhelmed by all I had to do	Ⓕ	Ⓞ	Ⓝ
P87 Felt depressed	Ⓕ	Ⓞ	Ⓝ
P88 Performed volunteer work	Ⓕ	Ⓞ	Ⓝ
P89 Came late to class	Ⓕ	Ⓞ	Ⓝ
P90 Played a musical instrument	Ⓕ	Ⓞ	Ⓝ
P91 Asked a teacher for advice after class	Ⓕ	Ⓞ	Ⓝ
P92 Voted in a student election	Ⓕ	Ⓞ	Ⓝ
P93 Used a personal computer	Ⓕ	Ⓞ	Ⓝ
P94 Typed a homework assignment	Ⓕ	Ⓞ	Ⓝ
P95 Discussed politics	Ⓕ	Ⓞ	Ⓝ
P96 Discussed sex	Ⓕ	Ⓞ	Ⓝ
P97 Demonstrated for a change in some military policy	Ⓕ	Ⓞ	Ⓝ

25. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself.

(Mark one in each row)

	Highest 10%	Above Average	Average	Below Average	Lowest 10%
P98 Academic ability	○	○	○	○	○
P99 Artistic ability	○	○	○	○	○
P100 Competitiveness	○	○	○	○	○
P101 Cooperativeness	○	○	○	○	○
P102 Drive to achieve	○	○	○	○	○
P103 Emotional health	○	○	○	○	○
P104 Leadership ability	○	○	○	○	○
P105 Mathematical ability	○	○	○	○	○
P106 Mechanical ability	○	○	○	○	○
P107 Physical health	○	○	○	○	○
P108 Popularity	○	○	○	○	○
P109 Public speaking ability	○	○	○	○	○
P110 Reading speed/comprehension	○	○	○	○	○
P111 Self-confidence (intellectual)	○	○	○	○	○
P112 Self-confidence (social)	○	○	○	○	○
P113 Understanding of others	○	○	○	○	○
P114 Writing ability	○	○	○	○	○

26. What is your best estimate of your parents' total income last year? Consider income from all sources before taxes. (Mark one)

P115

○ Less than $6,000	○ $40,000-49,999
○ $6,000-9,999	○ $50,000-59,999
○ $10,000-14,999	○ $60,000-74,999
○ $15,000-19,999	○ $75,000-99,999
○ $20,000-24,999	○ $100,000-149,999
○ $25,000-29,999	○ $150,000-199,999
○ $30,000-39,999	○ $200,000 or more

27. What is the highest level of formal education obtained by your parents?

(Mark one in each column)

	P116 Father	P117 Mother
Grammar school or less	○	○
Some high school	○	○
High school graduate	○	○
Postsecondary school other than college	○	○
Some college	○	○
College degree	○	○
Some graduate school	○	○
Graduate degree	○	○

28. Do you have a disability? (Mark all that apply)

- P118 ○ None
- P119 ○ Hearing
- P120 ○ Speech
- P121 ○ Orthopedic
- P122 ○ Learning disability
- P123 ○ Health-related
- P124 ○ Partially sighted or blind
- P125 ○ Other

29. In deciding to go to college, how important to you was each of the following reasons?

(Mark one answer for each possible reason)

	Very Important	Somewhat Important	Not Important
P126 My parents wanted me to go	Ⓥ	Ⓢ	Ⓝ
P127 I could not find a job	Ⓥ	Ⓢ	Ⓝ
P128 Wanted to get away from home	Ⓥ	Ⓢ	Ⓝ
P129 To be able to get a better job	Ⓥ	Ⓢ	Ⓝ
P130 To gain a general education and appreciation of ideas	Ⓥ	Ⓢ	Ⓝ
P131 To improve my reading and study skills	Ⓥ	Ⓢ	Ⓝ
P132 There was nothing better to do	Ⓥ	Ⓢ	Ⓝ
P133 To make me a more cultured person	Ⓥ	Ⓢ	Ⓝ
P134 To be able to make more money	Ⓥ	Ⓢ	Ⓝ
P135 To learn more about things that interest me	Ⓥ	Ⓢ	Ⓝ
P136 To prepare myself for graduate or professional school	Ⓥ	Ⓢ	Ⓝ

30. Mark only three responses, one in each column.

(M) Your mother's occupation — P139
(F) Your father's occupation — P138
(Y) Your probable career occupation — P137

NOTE: If your father or mother is deceased, please indicate his or her last occupation.

	Y	F	M
Accountant or actuary	Y	F	M
Actor or entertainer	Y	F	M
Architect or urban planner	Y	F	M
Artist	Y	F	M
Business (clerical)	Y	F	M
Business executive (management, administrator)	Y	F	M
Business owner or proprietor	Y	F	M
Business salesperson or buyer	Y	F	M
Clergy (minister, priest)	Y	F	M
Clergy (other religious)	Y	F	M
Clinical psychologist	Y	F	M
College teacher	Y	F	M
Computer programmer or analyst	Y	F	M
Conservationist or forester	Y	F	M
Dentist (including orthodontist)	Y	F	M
Dietitian or home economist	Y	F	M
Engineer	Y	F	M
Farmer or rancher	Y	F	M
Foreign service worker (including diplomat)	Y	F	M
Homemaker (full-time)	Y	F	M
Interior decorator (including designer)	Y	F	M
Interpreter (translator)	Y	F	M
Lab technician or hygienist	Y	F	M
Law enforcement officer	Y	F	M
Lawyer (attorney) or judge	Y	F	M
Military service (career)	Y	F	M
Musician (performer, composer)	Y	F	M
Nurse	Y	F	M
Optometrist	Y	F	M
Pharmacist	Y	F	M
Physician	Y	F	M
School counselor	Y	F	M
School principal or superintendent	Y	F	M
Scientific researcher	Y	F	M
Social, welfare or recreation worker	Y	F	M
Statistician	Y	F	M
Therapist (physical, occupational, speech)	Y	F	M
Teacher or administrator (elementary)	Y	F	M
Teacher or administrator (secondary)	Y	F	M
Veterinarian	Y	F	M
Writer or journalist	Y	F	M
Skilled trades	Y	F	M
Other	Y		
Undecided	Y		
Laborer (unskilled)		F	M
Semi-skilled worker		F	M
Other occupation		F	M
Unemployed		F	M

31. Mark one in each row:

(1) Disagree Strongly
(2) Disagree Somewhat
(3) Agree Somewhat
(4) Agree Strongly

P140 The Federal government is not doing enough to protect the consumer from faulty goods and services	4	3	2	1
P141 The Federal government is not doing enough to control environmental pollution	4	3	2	1
P142 The Federal government should raise taxes to reduce the deficit	4	3	2	1
P143 There is too much concern in the courts for the rights of criminals	4	3	2	1
P144 Federal military spending should be increased	4	3	2	1
P145 Abortion should be legal	4	3	2	1
P146 The death penalty should be abolished	4	3	2	1
P147 If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time	4	3	2	1
P148 The activities of married women are best confined to home and family	4	3	2	1
P149 Marijuana should be legalized	4	3	2	1
P150 Busing is O.K. if it helps to achieve racial balance in the schools	4	3	2	1
P151 It is important to have laws prohibiting homosexual relationships	4	3	2	1
P152 The chief benefit of a college education is that it increases one's earning power	4	3	2	1
P153 Employers should be allowed to require drug testing of employees or job applicants	4	3	2	1
P154 The best way to control AIDS is through widespread, mandatory testing	4	3	2	1
P155 Just because a man thinks that a woman has "led him on" does not entitle him to have sex with her	4	3	2	1
P156 The federal government should do more to control the sale of handguns	4	3	2	1
P157 A national health care plan is needed to cover everybody's medical costs	4	3	2	1
P158 Nuclear disarmament is attainable	4	3	2	1
P159 Racial discrimination is no longer a major problem in America	4	3	2	1
P160 The Federal government should do more to discourage energy consumption	4	3	2	1
P161 Realistically, an individual can do little to bring about changes in our society	4	3	2	1

32. During your last year in high school, how much time did you spend during a typical week doing the following activities?

Hours per week:	None	1-2	3-5	6-10	11-15	16-20	Over 20
P162 Studying/homework							
P163 Socializing with friends							
P164 Talking with teachers outside of class							
P165 Exercising/sports							
P166 Partying							
P167 Working (for pay)							
P168 Volunteer work							
P169 Student clubs/groups							
P170 Watching TV							

33. During high school, I: (Mark any that apply)

- P171 Was elected president of one or more student organizations
- P172 Received a high rating in a state or regional music contest
- P173 Had a major part in a play
- P174 Won an award in an art competition
- P175 Took a SAT/ACT preparation course
- P176 Edited a school publication
- P177 Participated in course-related community service projects
- P178 Won an award in a state or regional science contest
- P179 Was a member of a scholastic honor society

34. How would you characterize your political views? (Mark one) — P180

- Far left
- Liberal
- Middle-of-the-road
- Conservative
- Far right

35. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here? (Mark one answer for each possible reason)

	Very important	Somewhat important	Not important
P181 My relatives wanted me to come here	V	S	N
P182 My teacher advised me	V	S	N
P183 This college has a very good academic reputation	V	S	N
P184 This college has a good reputation for its social activities	V	S	N
P185 I was offered financial assistance	V	S	N
P186 This college offers special educational programs	V	S	N
P187 This college has low tuition	V	S	N
P188 My guidance counselor advised me	V	S	N
P189 I wanted to live near home	V	S	N
P190 A friend suggested attending	V	S	N
P191 A college rep. recruited me	V	S	N
P192 The athletic department recruited me	V	S	N
P193 This college's graduates gain admission to top graduate/professional schools	V	S	N
P194 This college's graduates get good jobs	V	S	N
P195 I was attracted by the religious affiliation/orientation of the college	V	S	N
P196 I wanted to go to a school about the size of this college	V	S	N
P197 I was attracted by the racial/ethnic make up of the student body at this college	V	S	N
P198 Not accepted anywhere else	V	S	N

36. Below is a list of different undergraduate major fields grouped into general categories. Mark only one oval to indicate your probable field of study. P199

ARTS AND HUMANITIES
- Art, fine and applied ..... (1)
- English (language and literature) ..... (2)
- History ..... (3)
- Journalism ..... (4)
- Language and Literature (except English) ..... (5)
- Music ..... (6)
- Philosophy ..... (7)
- Speech ..... (8)
- Theater or Drama ..... (9)
- Theology or Religion ..... (10)
- Other Arts and Humanities ..... (11)

BIOLOGICAL SCIENCE
- Biology (general) ..... (12)
- Biochemistry or Biophysics ..... (13)
- Botany ..... (14)
- Marine (Life) Science ..... (15)
- Microbiology or Bacteriology ..... (16)
- Zoology ..... (17)
- Other Biological Science ..... (18)

BUSINESS
- Accounting ..... (19)
- Business Admin. (general) ..... (20)
- Finance ..... (21)
- Marketing ..... (22)
- Management ..... (23)
- Secretarial Studies ..... (24)
- Other Business ..... (25)

EDUCATION
- Business Education ..... (26)
- Elementary Education ..... (27)
- Music or Art Education ..... (28)
- Physical Education or Recreation ..... (29)
- Secondary Education ..... (30)
- Special Education ..... (31)
- Other Education ..... (32)

ENGINEERING
- Aeronautical or Astronautical Eng. ..... (33)
- Civil Engineering ..... (34)
- Chemical Engineering ..... (35)
- Electrical or Electronic Engineering ..... (36)
- Industrial Engineering ..... (37)
- Mechanical Engineering ..... (38)
- Other Engineering ..... (39)

PHYSICAL SCIENCE
- Astronomy ..... (40)
- Atmospheric Science (incl. Meteorology) ..... (41)
- Chemistry ..... (42)
- Earth Science ..... (43)
- Marine Science (incl. Oceanography) ..... (44)
- Mathematics ..... (45)
- Physics ..... (46)
- Statistics ..... (47)
- Other Physical Science ..... (48)

PROFESSIONAL
- Architecture or Urban Planning ..... (49)
- Home Economics ..... (50)
- Health Technology (medical, dental, laboratory) ..... (51)
- Library or Archival Science ..... (52)
- Nursing ..... (53)
- Pharmacy ..... (54)
- Predental, Premedicine, Preveterinary ..... (55)
- Therapy (occupational, physical, speech) ..... (56)
- Other Professional ..... (57)

SOCIAL SCIENCE
- Anthropology ..... (58)
- Economics ..... (59)
- Ethnic Studies ..... (60)
- Geography ..... (61)
- Political Science (gov't., international relations) ..... (62)
- Psychology ..... (63)
- Social Work ..... (64)
- Sociology ..... (65)
- Women's Studies ..... (66)
- Other Social Science ..... (67)

TECHNICAL
- Building Trades ..... (68)
- Data Processing or Computer Programming ..... (69)
- Drafting or Design ..... (70)
- Electronics ..... (71)
- Mechanics ..... (72)
- Other Technical ..... (73)

OTHER FIELDS
- Agriculture ..... (74)
- Communications (radio, TV, etc.) ..... (75)
- Computer Science ..... (76)
- Forestry ..... (77)
- Law Enforcement ..... (78)
- Military Science ..... (79)
- Other Field ..... (80)
- Undecided ..... (81)

37. Please indicate the importance to you personally of each of the following. (Mark one for each item)

(N) Not Important (S) Somewhat Important (V) Very Important (E) Essential

- P202 Becoming accomplished in one of the performing arts (acting, dancing, etc.) ..... E V S N
- P203 Becoming an authority in my field ..... E V S N
- P204 Obtaining recognition from my colleagues for contributions to my special field ..... E V S N
- P205 Influencing the political structure ..... E V S N
- P206 Influencing social values ..... E V S N
- P207 Raising a family ..... E V S N
- P208 Having administrative responsibility for the work of others ..... E V S N
- P209 Being very well off financially ..... E V S N
- P210 Helping others who are in difficulty ..... E V S N
- P211 Making a theoretical contribution to science ..... E V S N
- P212 Writing original works (poems, novels, short stories, etc.) ..... E V S N
- P213 Creating artistic work (painting, sculpture, decorating, etc.) ..... E V S N
- P214 Becoming successful in a business of my own ..... E V S N
- P215 Becoming involved in programs to clean up the environment ..... E V S N
- P216 Developing a meaningful philosophy of life ..... E V S N
- P217 Participating in a community action program ..... E V S N
- P218 Helping to promote racial understanding ..... E V S N
- P219 Keeping up to date with political affairs ..... E V S N

38. What is your best guess as to the chances that you will: (Mark one for each item)

(N) No Chance (L) Very Little Chance (S) Some Chance (V) Very Good Chance

- P220 Change major field? ..... V S L N
- P221 Change career choice? ..... V S L N
- P222 Fail one or more courses? ..... V S L N
- P223 Graduate with honors? ..... V S L N
- P224 Be elected to student office? ..... V S L N
- P225 Get a job to help pay for college expenses? ..... V S L N
- P226 Work full time while attending college? ..... V S L N
- P227 Join a social fraternity, sorority, or club? ..... V S L N
- P228 Play varsity/intercollegiate athletics? ..... V S L N
- P229 Be elected to an academic honor society? ..... V S L N
- P230 Make at least a "B" average? ..... V S L N
- P231 Need extra time to complete your degree requirements? ..... V S L N
- P232 Get tutoring help in specific courses? ..... V S L N
- P233 Have to work at an outside job during college? ..... V S L N
- P234 Seek vocational counseling? ..... V S L N
- P235 Seek individual counseling on personal problems? ..... V S L N
- P236 Get a bachelor's degree (B.A., B.S., etc.)? ..... V S L N
- P237 Participate in student protests or demonstrations? ..... V S L N
- P238 Drop out of this college temporarily (exclude transferring)? ..... V S L N
- P239 Drop out permanently (exclude transferring)? ..... V S L N
- P240 Transfer to another college before graduating? ..... V S L N
- P241 Be satisfied with your college? ..... V S L N
- P242 Find a job after college in the field for which you were trained? ..... V S L N
- P243 Get married while in college? (skip if married) ..... V S L N
- P244 Participate in volunteer or community service work? ..... V S L N

39. The Higher Education Research Institute at UCLA actively encourages the colleges that participate in this survey to conduct local studies of their students. If these studies involve collecting follow-up data, it is necessary for the institution to know the students' ID numbers so that follow-up data can be linked with the data from this survey. If your college asks for a tape copy of the data and signs an agreement to use it only for research purposes, do we have your permission to include your ID number in such a tape? P247 Yes ○ No ○

The remaining ovals are provided for items specifically designed by your college rather than the Higher Education Research Institute. If your college has chosen to use the ovals, please observe carefully the supplemental directions given to you.

P248 40. A B C D E
P249 41. A B C D E
P250 42. A B C D E
P251 43. A B C D E
P252 44. A B C D E
P253 45. A B C D E
P254 46. A B C D E
P255 47. A B C D E
P256 48. A B C D E
P257 49. A B C D E

THANK YOU!

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